

Information Request DTE-SEBANE-1-1

In reference to the pre-filed testimony of Andrew G. Greene at 13, lines 10-11, please quantify the “significant portion of the benefit...due to rate design...that is only partially offset by imposition of the standby charge.” Describe any assumption used as a basis for calculations.

Response

The rate design effects of the proposed standby rates described in my pre-filed testimony at p. 13 lines 10-11, pertain to Table 2 of my testimony and the rate impacts for the illustrative large grocery store.

The assumed 100,000 square foot grocery store has a load profile (based on the ITRON Inc. load shape data) consisting of a peak load of 855 kW, annual consumption of 4,773,660 kWh, and an annual capacity factor of 63.7%. In the first data row (“Current Rate, no PV”) the annual bills for this assumed customer (without PV) are shown under the various NSTAR rates. For example, the Commonwealth G-3 customer is currently paying \$472,141.19 per year, while the Cambridge G-2 customer is paying \$429,088.67 per year

The next row (“Standby Rate, no PV”) shows the price for electricity service under the proposed standby (SB-1) rates without any change in the customer’s load – that is, still without the PV system. Under the Commonwealth SB-1 rate, the customer would pay \$462,095.88 per year – a savings of \$10,045.32 relative to the current Commonwealth G-3 tariff. Thus, absent any effect of the PV system, the standby rate itself has produced a rate re-design effect. Similarly, for the Cambridge G-2 customer, a shift to the standby rate SB-2 produces a \$7,381.64 reduction in costs. There is no rate re-design effect seen under the Boston Edison rate example (T-2/SB-1) because there is no shifting of demand-related costs from the energy portion of the rate to the demand portion of the rate (as was the case for the Commonwealth SB-1 rate and the Cambridge SB-2 rate).

The rate re-design effects of the standby rates are less beneficial (or even harmful) for lower load-factor customers, such as the large office building, shown in Table 3 of my pre-filed testimony. Here, the savings under the Commonwealth SB-1 rate and the Cambridge SB-3 rate have been significantly reduced, while the Cambridge SB-2 customer actually will see an increase in costs due entirely to rate re-design aspect of the proposed standby rate.

Table 2 also shows that with the assumed PV system for the large grocery store, the Commonwealth SB-1 and Cambridge SB-2 and SB-3 rates increase the bill savings the customers' would realize compared to the existing rates with the PV system. However, the increased savings are less than the rate re-design benefits noted above. This is because the standby mechanism has eliminated distribution-related demand charge savings that occur under the current rates.